aomwa
association of ohio metropolitan wastewater agencies

John G. Newsome, P.E.,
President, AOMWA
1250 Fairwood Avenue
Columbus, OH 43215
(614) 645-8276

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SUBMITTED VIA EMAIL TO
Opie.Jodie@epa.gov

Re: U.S. EPA Region 5's Specific Objection to Ohio EPA's Reissuance of the City of Euclid's NPDES Permit

To Whom It May Concern:

The Association of Ohio Metropolitan Wastewater Agencies ("AOMWA") appreciates the opportunity to comment in response to the Specific Objection to the Proposed NPDES Permit for the City of Euclid (OH0031062) ("Objection Letter") sent to Ohio EPA on November 2, 2021 by the Water Division in U.S. EPA Region 5. AOMWA is a not-for-profit trade association that represents the interests of public wastewater agencies across the state of Ohio, serving more than 4 million Ohioans and successfully treating more than 320 billion gallons of wastewater each year.[1] AOMWA's members include the City of Euclid. As discussed in greater detail below, the City of Euclid is a disadvantaged community that is already engaged in a project to improve the City's plant and infrastructure that is projected to cost over $200 million.

AOMWA was concerned by several aspects of U.S. EPA's Objection Letter. U.S. EPA's proposed permit limits equate to a concentration limit of 0.009 mg/L for Total Phosphorus, and would be impossible for the City of Euclid to comply with. It would not be an effective use of resources to attempt to attain a Total Phosphorus concentration near this level. All municipalities face competing investments to address the environment and human health, and the City of Euclid and others have already expended significant resources to address phosphorus reductions. We believe that it would be ineffective to require even lower nutrient limits for municipal wastewater sources, especially when the data shows that they contribute no more than 5 percent of phosphorus loading to Lake Erie.

1. **The Objection Letter calls for a permit limit that will not lead to any measurable water quality benefit.**

It has not been shown that U.S. EPA's proposed permit limits would result in a measurable improvement in Lake Erie's water quality. In the Objection Letter, U.S. EPA explains that it would issue a permit with a monthly average limit of 0.72 kg/day and a weekly average limit of 0.9 kg/day.

[1] AOMWA members include cities of Akron, Avon Lake, Bowling Green, Canton, Columbus, Dayton, Euclid, Fairfield, Hamilton, Lancaster, Lima, Marysville, Middletown, Newark, Portsmouth, Solon, Springfield, Wadsworth, Warren, and Butler County, Greene County, Hamilton County, Summit County, the Metropolitan Sewer District of Greater Cincinnati, the Northeast Ohio Regional Sewer District, and the Tri-Cities Regional Wastewater Authority.

These equate to concentration limits of a monthly average of 0.0086 mg/L and a weekly average of 0.01 mg/L—a 99 percent reduction in the effluent limits for Euclid.

This reduction would not lead to any significant environmental benefit as it would only reduce phosphorus loading to Lake Erie by 0.11 percent. Ohio EPA's Nutrient Mass Balance Study found that the nutrient contributions from point sources, including publicly owned treatment works ("POTWs"), industry, and permitted wet weather discharges, contribute a mere fraction of phosphorus from Ohio watersheds to Lake Erie, while nonpoint sources are the dominant phosphorus contributor.[2] In addition, Ohio EPA has come to the conclusion that Lake Erie's nutrient impacts are largely attributable to nonpoint source impacts into the Western Basin and from locations other than the Central Basin.[3] These nonpoint sources in the Maumee River watershed (within the Western Basin of Lake Erie) account for 90 percent of the total phosphorus load in the heavily agricultural region. *Id*. at 24, Fig. 12. Meanwhile, only 5 percent of the loading in the Central Basin is attributable to major municipal Ohio facilities. The Nutrient Mass Balance Study recognized that "if nonpoint nutrients are found to be the major contributor of downstream total phosphorus load, then focusing remediation on point source nutrients would neither be prudent or efficient." *Id*. at 5.[4] As a result, Ohio EPA has prioritized and is aggressively pursuing a significant TMDL in the Maumee watershed. Given that Ohio EPA is currently addressing what it believes to be the likely source of the impairment in Lake Erie, it would be premature to require costly expenditures in a separate watershed.

As AOMWA noted in its oral testimony at the public hearing on June 8, 2022 (the "Public Hearing"), U.S. EPA is imposing unattainable requirements on disadvantaged taxpayers when U.S. EPA's proposed permit limits would not materially affect water quality in Lake Erie. Meanwhile, the legislative and regulatory authorities have declined to develop, implement, and enforce initiatives that target the nonpoint source of the issue, in part due to significant cost concerns.

Further, the treatment technologies that would be necessary to reduce phosphorus would lead to significant environmental detriments. The technological improvements would cause an increase in energy consumption, increasing emissions of greenhouse gases. Further, these "improvements" would also increase chemical usage and would be inconsistent with environmental sustainability objectives. Accordingly, the speculative environmental benefit associated with U.S. EPA's proposed permit limits would also cause known environmental damage.

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[2] *Ohio EPA Nutrient Mass Balance Study* at 17 (Dec. 24, 2020); tbls. B1, B3, B5, B7, B9, B11, B13, B15.
[3] *Ohio EPA Presentation, Euclid NPDES: US EPA Region V Specific Objection to Phosphorus Limits*, at slide 49 (loadings from Maumee watershed in the Western Basin of Lake Erie comprise "most of Ohio's TP contributions to harmful algal blooms in Lake Erie"), https://epa.ohio.gov/static/Portals/35/documents/20220608-Euclid-Hearing-Slides.pdf; *see also id*. at slide 15 ("Once Ohio has completed the WLEB [Western Lake Erie Basin] TMDL, we will be looking to evaluate what Lake Erie impairments remain in Central Basin" but "NPDES TP [Total Phosphorus] reductions may or may not be needed to address impairments in the Central Basin").
[4] https://epa.ohio.gov/static/Portals/35/documents/Nutrient-Mass-Balance-Study-2020.pdf

2. Ohio already has a nutrient strategy that accounts for the unique characteristics in this State.

Ohio's extensive nutrient management efforts are described in its biennial Domestic Action Plan. The most recent Domestic Action Plan[5] was finalized in 2020 and summarizes the State's efforts to achieve the goal set by the Governors of Ohio and Michigan and the Premier of Ontario to reduce phosphorus loadings to Lake Erie by 40 percent through the Western Lake Erie Basin Collaborative Agreements of 2015 and 2019. Ohio's Domestic Action Plan advances the objectives associated with achieving the proposed nutrient reduction targets in the Great Lakes Water Quality Agreement under Annex 4, Nutrients.

Ohio's goals include achieving a 40 percent total annual load reduction in the amount of total phosphorus entering Lake Erie's Central Basin by the year 2025. *Domestic Action Plan* at 2. This goal applies to priority tributary watersheds to the Central Basin of Lake Erie in Ohio, which include the Maumee, Toussaint, Portage, Sandusky, Huron, Vermilion, Cuyahoga and Grand Rivers. *Id*.[6] U.S. EPA should have accounted for this local framework for Lake Erie, but instead merely used its own recommended criteria as a method of "translating" narrative water quality standards into binding but unsupported numeric limits.

3. The proposed permit limits are technically infeasible and call for wasteful investments of limited public resources.

The permit limits supported by U.S. EPA are technically infeasible in this case and would be inappropriately costly and would divert resources away from other needed initiatives. As discussed above, Ohio EPA's NPDES Permit retained a monthly total phosphorus concentration limit of 1.0 mg/L, and U.S. EPA proposed a limit that equates to 0.0086 mg/L. This amounts to a *99 percent reduction* in total phosphorus concentration limits. The cost to achieve a monthly average concentration anywhere near 0.00086 mg/L is staggering. For just one AOMWA member, the cost to reduce *a single plant's* concentration to 0.15 mg/L as a monthly limit would be *several hundreds of millions of dollars*. For another member, capital costs to achieve a concentration of 0.3 mg/L would exceed $20 million. U.S. EPA is seeking a permit limit that is more than an order of magnitude lower than 0.15-0.3 mg/L. As a result, this would force at least some of those individual utilities to face costs *approaching or exceeding $1 billion* to attain an effluent concentration limit close to U.S. EPA's preferred limit, with no measurable benefit to water quality.

Our members routinely invest significant funds to address water quality and human health issues, but the investments discussed above would be disproportionate, speculative, and would not address the primary source of nutrient impacts in the area. The proposal to further lower phosphorus limits for POTWs would collectively cost billions in nutrient reduction technologies and would not provide any measurable benefit to water quality.

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[5] https://lakeerie.ohio.gov/wps/wcm/connect/gov/e97b89ba-74a1-4b9b-b49e-fc1a6a03d2dc/DAP+2-0+FINAL+2020-06-08.pdf?MOD=AJPERES&CONVERT_TO=url&CACHEID=ROOTWORKSPACE.Z18_M1HGGIK0N0JO00QO9DDDDM3000-e97b89ba-74a1-4b9b-b49e-fc1a6a03d2dc-n-T4gKY.

[6] Load targets for the Maumee, Toussaint and Portage Rivers, located in the Western Basin, have been set for the Central Basin because they "will also serve to reduce phosphorus to the central basin of Lake Erie." *Domestic Action Plan* at 2, n.7.

Additionally, as discussed above, the State of Ohio is implementing a number of nutrient management strategies and prioritizing those actions that are likely to lead to the greatest environmental benefits. Ohio EPA's Maumee Watershed Nutrient TMDL is at or near the top of its list, based on a scientifically-supported analysis of priorities for the State. The implementation of that TMDL may impact what investments are required in other areas of the Lake Erie watershed, and an adaptive management approach to the issue could help to preserve limited public finances.

This type of adaptive management approach is consistent with the Great Lakes Water Quality Agreement. The Agreement itself expressly identifies "adaptive management" as a guiding principle "to achieve the purpose of this Agreement." *Id*. at 6. It defines adaptive management as "implementing a systematic process by which the Parties assess effectiveness of actions and adjust future actions to achieve the objectives of this Agreement, as outcomes and ecosystem processes become better understood." *Id*. Ohio's approach is consistent with the text and intent of the Agreement.

4. Ohio POTWs have already spent billions of dollars on infrastructure and wastewater treatment processes that reduce nutrient loading.

Ohio's public wastewater agencies have been expending and continue to expend billions of dollars on infrastructure and treatment technologies as part of federally-mandated consent decrees and existing permitting and regulatory requirements. In fact, many of these agencies' systems have already improved their wastewater treatment processes to achieve phosphorus effluent limits, and as a result, have already reduced their total phosphorus discharge loadings by greater than the 40 percent referenced in the Domestic Action Plan. Likewise, many of these communities are making significant investments in green infrastructure and other innovations to address water quality issues associated with stormwater discharges.

As Ohio's Domestic Action Plan notes, many municipalities have submitted optimization plans to refine the operation of existing treatment works to further reduce phosphorus loadings. These plans periodically identify potential optimization plans. Meanwhile, others that have already invested significantly to reduce their total phosphorus discharge loadings are already operating below the 0.5 mg/L range and were not able to identify additional optimization opportunities.

Water quality improvements in Lake Erie should be considered before imposing additional requirements, especially in light of the finding that Ohio POTWs comprise a small fraction of phosphorus loading—only 5 percent. Any regulatory framework for implementing nutrient criteria should allow flexibility for regulated dischargers such as our members to maximize their limited financial resources by focusing on infrastructure and technology improvements that have been shown to have an appreciable environmental benefit.

Similarly, local governments are expected to face significant new costs associated with replacing lead service lines and monitoring, controlling, and remediating designated emerging contaminants, which may include PFAS, pharmaceutical personal care products, and other developing issues. Compounding the challenges associated with these issues, Ohio utilities are experiencing sharp cost increases in required goods and services such as construction, chemical supply, and equipment. Ultimately, local governments will need considerable flexibility to strategically prioritize their capital investments and to continually assess the viability of those investments as the priorities of local communities evolve.

As mentioned earlier, the City of Euclid is a disadvantaged community. Median Household Income in the City has remained stagnant since 1990, and these figures are not adjusted for inflation. U.S. EPA has recently emphasized its focus on disadvantaged communities and has noted in the context of infrastructure funding that "a key priority of [the Bipartisan Infrastructure Law] is to ensure that disadvantaged communities benefit equitably from this historic investment in water infrastructure" and receive funding for projects such as lead service lines and emerging contaminants. Unfortunately, the Objection Letter outlines a position that would place further financial strain on these disadvantaged communities and would eliminate their flexibility to address other emerging priorities, deepening environmental justice inequities with no identifiable environmental benefit.

5. The application of the Lakes and Reservoirs Recommendations to Lake Erie is not scientifically supported.

U.S. EPA has conceded that Great Lakes water quality data was not used in the development of the criteria that are currently being applied as an unpromulgated *de facto* water quality standard. *See U.S. EPA, Response to Public Comments on U.S. EPA's Draft Ambient Water Quality Criteria Recommendations for Lakes and Reservoirs of the Conterminous United States: Information Supporting the Development of Numeric Nutrient Criteria* ("*U.S. EPA Response to Comments*") (Aug. 2021) at pg. 62 ("The criterion models were developed using [National Lakes Assessment] data, and therefore, may be limited in applicability to the types of lakes sampled by NLA. For example, the Great Lakes and tidally influenced lakes were not included in the population sampled by the NLA. However, relationships estimated in the national criterion models may be informative when interpreting data collected from these other systems, and further evaluation of the applicability of these models is warranted."). Lake Erie is dramatically unique from inland lakes, as it receives 80 percent of its water from the upper Great Lakes, 10 percent from precipitation, and 10 percent from Lake Erie Tributaries. Much of the water enters the lake from the Western Basin, flows east into the Central Basin, and eventually into Lake Ontario. As a result, it is fundamentally different from the lakes from which the federal recommendations were derived.

Further, U.S. EPA's application of these criteria oversimplifies matters and fails to provide any information that would assist AOMWA and other stakeholders in assessing any management decisions made about risk. U.S. EPA provided no information as to tools that would help generate information regarding risk for consideration by the States.

Finally, the microcystin-chlorophyll-a model apparently allows for consideration for Dissolved Reactive Phosphorus ("DRP"). Yet U.S. EPA did not include DRP data in its assessment. In Ohio, Total Phosphorus loads have declined and are holding steady, however, DRP loads are increasing. Ohio EPA is considering DRP in the development of its Maumee TMDL, and we believe Ohio EPA's experience positions it well to develop an approach to nutrient management that is well-tailored to Ohio's circumstances.

6. The Objection Letter is inconsistent with U.S. EPA's current nutrient policies and the Clean Water Act's deference to states.

More fundamentally, U.S. EPA's approach is inconsistent with its own policies and the Clean Water Act. Just two months ago, U.S. EPA's Assistant Administrator for the Office of Water, Radhika Fox, issued a policy memorandum entitled Accelerating Nutrient Pollution Reductions in the Nations Waters. That memo included the following assurances:

- U.S. EPA would "redouble" its efforts to "support" states to achieve nutrient reductions from all sources. *Id*. at 3.
- U.S. EPA "expects" that states will either "adopt numeric nutrient criteria into their water quality standards or commit to use numeric targets to implement applicable narrative criteria statements." *Id*. at 4.
- U.S. EPA "expects states to consider the new [numeric lakes and reservoirs] criteria during their next triennial water quality standards review." *Id*. at 7.

The Objection Letter is inconsistent will all three of these national policies, as it: (1) fails to support Ohio EPA, instead disregarding Ohio's findings in the Nutrient Mass Balance Study and efforts to study the impact of DRP; (2) prematurely imposes *de facto* federal criteria, by supplanting Ohio's role in considering use of numeric targets, while a TMDL is being developed to address the primary source; and (3) prematurely attempts to end-run around Ohio's own consideration of the recommended lakes and reservoirs criteria by assuming federal responsibility and actually applying those criteria from the outset.

Further, this approach seeks to assume federal control over state permitting decisions in a manner that is not only imprudent, but also unlawful. The Clean Water Act's fundamental policy is to "recognize, preserve, and protect the primary responsibilities and rights of States . . . to plan the development and use . . . of land and water resources . . . ." 33 U.S.C. § 1251(b). U.S. EPA's own regulations require merely that a State consider federal criteria as part of its triennial review and "provide an explanation" as to the results of its triennial review. 40 C.F.R. § 131.20(a).

7. The Objection Letter is inconsistent with U.S. EPA's assurances in the development of the Lakes and Reservoirs Recommended Criteria.

The Objection Letter also fails to provide deference to Ohio's independently-developed approach to addressing water quality issues associated with Lake Erie. In the U.S. EPA Response to Comments, the Agency repeatedly emphasized the flexibility for states to develop their own numeric nutrient criteria. These assurances included the following:

> EPA sought to find regulatory balance in its recommendations, offering constructive information that states can use to reliably derive numeric nutrient criteria for lakes and reservoirs while at the same time *avoiding prescriptive, "one-size fits all" recommendations*. As such, EPA refrained from recommending specific values from the models. Instead, EPA chose to *craft flexibilities in the recommendations in which states can customize the models with their state-specific data to generate candidate criteria to reflect the environmental conditions of their lakes and reservoirs* . . . . EPA also refrained from offering prescriptions on what constitutes "other scientifically defensible methods or the conditions under which a state would not use its recommendations, choosing instead to let states articulate the scientific and technical rigor associated with their preferred data and methods."

Id. at pg. 15 (emphasis added). U.S. EPA also specifically disclaimed any use of a rigid correlation between chlorophyll and toxin production:

> EPA acknowledges that microcystin production for a given level of Chl varies as evidenced by the figures shown in the criterion document; however, there is clear and widespread evidence in these data and the literature (detailed in the recommendation) that the risk of toxin production and concentration increase with

> Chl concentration. *This variability is, in part, why EPA is providing flexibility to states and authorized tribes to make risk management decisions that reflects their risk tolerance in light of this variability*.

Id. at pg. 19 (emphasis added). As a result of these assurances, stakeholders were given the impression that no one-size-fits-all approach would be imposed on the states, especially the Great Lakes.

8. Water quality trading will not solve the problems generated by a 0.0086 mg/L permit limit.

Although AOMWA does not fully understand U.S. EPA's rationale for its preferred permit limit, U.S. EPA may intend to impose unrealistic limits with the expectation that the City of Euclid could use water quality trading to achieve compliance. If this is the case, we respectfully request that U.S. EPA consider unique characteristics to Ohio's water quality trading program. Ohio's program in Ohio Administrative Code 3745-5 does not have robust participation. AOMWA members are aware of only one small water quality trading program in Northeast Ohio that is currently active, but it is located south of Akron in the Ohio River basin rather than the Lake Erie basin. Further, as discussed above, Ohio EPA has determined that phosphorus impacts in the Central Basin of Lake Erie are largely attributable to areas outside of the Central Basin. As a result, it would be of limited benefit to reduce nonpoint source loading near the City of Euclid, in an area that is over 100 miles east of the source of the phosphorus loading. It would also be fundamentally inequitable to force residents of a disadvantaged community such as the City of Euclid to fund nonpoint source reductions outside of their watershed.

In conclusion, AOMWA submits that the City of Euclid's permit should reflect considerations unique to Ohio, including technical feasibility and a weighing of costs and potential environmental benefits. We believe that the positions of U.S. EPA as outlined in the Objection Letter should be revisited to reflect these considerations, and we request that U.S. EPA withdraw its objection. AOMWA appreciates U.S. EPA's consideration of these comments.

Should you have any questions, please contact Rees Alexander at rees.alexander@squirepb.com or (614) 365-2798. Thank you again for your attention to and consideration of these comments.

Sincerely,

John G. Newsome, P.E.
President, AOMWA

cc: (via email)
Debra Shore, Region 5, U.S. EPA
Radhika Fox, Office of Water, U.S. EPA
Bruno Pigott, Office of Water, U.S. EPA
Laurie Stevenson, Ohio EPA
Tiffani Kavalec, Ohio EPA
Kirsten Holzheimer Gail, Mayor, City of Euclid
Daniel Knecht, City of Euclid
Kyle Dreyfuss-Wells, Northeast Ohio Regional Sewer District
Eric Luckage, Northeast Ohio Regional Sewer District
Rees Alexander, Esq., Squire Patton Boggs (US) LLP
Katherine Wenner, Esq., Squire Patton Boggs (US) LLP